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ABSTRACT OF THE DISCLOSURE

5 An optical fiber bonding scheme provides improved bonding properties and improved lifetime for non-hermetic fiber optic packages such as OSAs. The bonding scheme includes an optical fiber bonded to a substrate surface with an epoxy and a diffusion retarding plate covering the epoxy. The diffusion retarding plate prevents moisture absorption by the top surface of the epoxy and the large footprint of the epoxy provides a long diffusion path which produces a lower water concentration gradient within the epoxy, restricts lateral diffusion of absorbed water molecules within the epoxy, and produces an extremely saturation resistant epoxy. The diffusion retarding plate may further include legs that bound opposed sides of the epoxy providing further saturation resistance.

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